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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,692	11/09/2005	Avigdor Scherz	SCHERZ4	8697
1444	7590	04/26/2010	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C.			WARD, PAUL V	
624 NINTH STREET, NW				
SUITE 300			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20001-5303			1624	
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			04/26/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/534,692	SCHERZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	PAUL V. WARD	1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 25 January 2010.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-3,10-19,36-38 and 42-50 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-3,10-19,36-38 and 42-50 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/1/10 &amp; 3/4/10</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|  | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

**STATUS OF THE CLAIMS:** Claims 1-3, 10-19, 36-38 and 42-50 are pending in this application.

### ***Claim Objections***

1. Claims 45 and 45-50 are objected to because of the following informalities:

(a) Applicant recites “corresponding”. Examiner suggests amending the claim to include the exact compound intended.

### ***Claim Rejections - 35 USC § 112, second paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 1-3, 10-19, 36-38 and 42-50 and claims dependent thereon are indefinite as it recites residue of an amino acid, peptide or protein. The terms are relative terms, which render the claim indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 10-19, 36-38 and 42-50 and are rejected under 35

U.S.C. 102(b) as being anticipated by Scherz et al. (WO 97/19081).

Applicant teaches bacteriochlorophyll compounds wherein all the variables are as defined in the claims.

Scherz discloses bacteriochlorophyll compounds, which share the same formulaic compounds. (See Abstract and pages 6-10). The compounds in the said reference read on the instant claim. (See figures 1-2, and examples).

Additionally, Scherz teaches methods of preparing bacteriochlorophyll compounds and methods of photodynamic therapy using said bacteriochlorophyll compounds. (See pages 7-10). The methods of preparing bacteriochlorophyll compounds and methods of photodynamic therapy using said bacteriochlorophyll compounds in the reference reads on the instant claim. Since Scherz teaches the exact compounds and methods, Applicant's claims are anticipated, and thus, rejected under 35 U.S.C. 102(b).

4. Claims 1-3, 10-19, 36-38 and 42-50 and are rejected under 35 U.S.C. 102(b) as being anticipated by Scheer et al. (WO 01/040232).

Scheer discloses bacteriochlorophyll compounds, which share the same formulaic compounds. (See Abstract and pages 5-7). The compounds in the said reference read on the instant claim. (See figures 1-2, and examples).

Additionally, Scheer discloses methods of preparing bacteriochlorophyll compounds and methods of photodynamic therapy using said bacteriochlorophyll compounds. (See pages 8-12 and 18-30). The methods of preparing and methods of using the bacteriochlorophyll compounds in the reference read on the instant claim. Since Scheer teaches the exact compounds and methods, Applicant's claims are anticipated, and thus, rejected under 35 U.S.C. 102(b).

5. Claims 1-3, 10-19, 36-38 and 42-50 and are rejected under 35 U.S.C. 102(b) as being anticipated by Scherz et al. (WO 00/33833).

Scherz discloses bacteriochlorophyll compounds, which share the same formulaic compounds. (See Abstract and pages 5-8). The compounds in the said reference read on the instant claim. (See pages 10-12 and examples).

Additionally, Scherz discloses methods of preparing bacteriochlorophyll compounds and methods of photodynamic therapy using said bacteriochlorophyll compounds. (See pages 15-22). The methods of preparing and using the bacteriochlorophyll compounds in the said reference read on the instant claim.

Since Scherz teaches the exact compounds and methods of preparing, Applicant's claims are anticipated, and thus, rejected under 35 U.S.C. 102(b).

6. Claims 1-3 and 10-19 and are rejected under 35 U.S.C. 102(b) as being anticipated by Scheer et al. (DE 4121876).

Scheer discloses bacteriochlorophyll compounds, which share the same formulaic compounds. (See Abstract and pages 3-15). The compounds in the said reference read on the instant claim. (See pages 3-15 and examples). Since Scherz teaches the exact compounds, Applicant's claims are anticipated, and thus, rejected under 35 U.S.C. 102(b).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer et al. (DE 4121876).

Scheer teaches a generic group of bacteriochlorophyll derivatives, which embraces Applicants' claimed compounds. (See formula I-III and definitions for R<sub>1-3</sub>). The claims differ from the reference by reciting specific species and a more limited genus than the reference. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species of the genus taught by the reference, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar properties, and thus, the same use as taught for the genus as a whole. One of ordinary skill in the art would have been motivated to select the claimed compounds from the genus in the reference

since such compounds would have been suggested by the reference as a whole.

A prior art disclosed genus of useful compounds is sufficient to render *prima facie* obvious a species falling within a genus. Thus, Applicant's claims are obvious, and therefore, rejected under 35 U.S.C. 103.

8. Claims 1-3, 10-19, 36-38 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherz et al. (WO 97/19081).

Schertz teaches a generic group of bacteriochlorophyll derivatives, methods of preparing bacteriochlorophyll compounds and methods of photodynamic therapy using said bacteriochlorophyll compounds, which embraces Applicants' claimed compounds. (See formula I and definitions for R<sub>1-4</sub>). The claims differ from the reference by reciting specific species and a more limited genus than the reference. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species of the genus taught by the reference, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar properties, and thus, the same use as taught for the genus as a whole. One of ordinary skill in the art would have been motivated to select the claimed compounds from the genus in the reference since such compounds would have been suggested by the reference as a whole.

A prior art disclosed genus of useful compounds is sufficient to render *prima facie* obvious a species falling within a genus. Thus, Applicant's claims are obvious, and therefore, rejected under 35 U.S.C. 103.

9. Claims 1-3, 10-19, 36-38 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheer et al. (WO 01/040232).

Scheer teaches a generic group of bacteriochlorophyll derivatives, methods of preparing bacteriochlorophyll compounds and methods of photodynamic therapy using said bacteriochlorophyll compounds, which embraces Applicants' claimed compounds. (See formula I and definitions for R<sub>1-4</sub>). The claims differ from the reference by reciting specific species and a more limited genus than the reference. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species of the genus taught by the reference, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar properties, and thus, the same use as taught for the genus as a whole. One of ordinary skill in the art would have been motivated to select the claimed compounds from the genus in the reference since such compounds would have been suggested by the reference as a whole. A prior art disclosed genus of useful compounds is sufficient to render *prima facie* obvious a species falling within a genus. Thus, Applicant's claims are obvious, and therefore, rejected under 35 U.S.C. 103.

10. Claims 1-3, 10-19, 36-38 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scherz et al. (WO 00/33833).

Schertz teaches a generic group of bacteriochlorophyll derivatives, methods of preparing bacteriochlorophyll compounds and methods of

photodynamic therapy using said bacteriochlorophyll compounds, which embraces Applicants' claimed compounds. (See formula I and definitions for R<sub>1-4</sub>). The claims differ from the reference by reciting specific species and a more limited genus than the reference. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to select any of the species of the genus taught by the reference, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar properties, and thus, the same use as taught for the genus as a whole. One of ordinary skill in the art would have been motivated to select the claimed compounds from the genus in the reference since such compounds would have been suggested by the reference as a whole. A prior art disclosed genus of useful compounds is sufficient to render *prima facie* obvious a species falling within a genus. Thus, Applicant's claims are obvious, and therefore, rejected under 35 U.S.C. 103.

***Conclusion***

Claims 1-3, 10-19, 36-38 and 42-50 are pending. Claims 1-3, 10-19, 36-38 and 42-50 are rejected. No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL V WARD whose telephone number is 571-272-2909. The examiner can normally be reached on M-F 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. James O Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/PAUL V WARD/  
Examiner, Art Unit 1624**